



# 2

PATENT

**LIST OF PENDING U.S. PATENT APPLICATION(S)**

The following pending U.S. patent application(s) is/are listed for consideration by the Examiner.

- for*
- 1) U.S. Application Serial No. 09/551,113, entitled CONCURRENT SHARED OBJECT IMPLEMENTED USING A LINKED LIST WITH AMORTIZED NODE ALLOCATION, filed April 18, 2000, by inventor(s) Paul A. Martin, David L. Detlefs, Alexander T. Garthwaite, and Guy L. Steele Jr.
  

*for*

  - 2) U.S. Application Serial No. 09/551,311, entitled SHARED OBJECT IMPLEMENTED USING A LINKED-LIST TECHNIQUE THAT TOLERATES CERTAIN CONCURRENT OPPOSING-END REMOVALS USING A DISTINGUISHING POINTER VALUE, filed April 18, 2000, by inventor(s) Guy L. Steele Jr., Alexander T. Garthwaite, Paul A. Martin, and Nir N. Shavit.
  

*for*

  - 3) U.S. Application Serial No. 09/547,288, entitled MAINTAINING A DOUBLE-ENDED QUEUE IN A CONTIGUOUS ARRAY WITH CONCURRENT NON-BLOCKING INSERT AND REMOVE OPERATIONS USING A DOUBLE COMPARE-AND-SWAP PRIMITIVE, filed April 11, 2000, by inventor(s) Nir N. Shavit, Ole Agesen, David L. Detlefs, Christine H. Flood, Alexander T. Garthwaite, Paul A. Martin, and Guy L. Steele Jr.

*Leri A. Bellak, Jr.**3/12/04*

***Pursuant to MPEP § 609(D), Applicant(s) wish(es) to avoid publication of identifying information for the pending applications listed above on any patent that issues from the above-identified application.***

***Applicant(s) request(s) that the Examiner indicate consideration of the pending applications listed above in accordance with MPEP 609(C)(2) by marking "all considered" hereon together with his or her initials, and returning a copy of this page, so marked, with the next communication. THANK YOU.***

#9

U.S. Department of Commerce, Patent and Trademark Office		Attorney Docket No.: 1004-4664
		Application No.: 09/547,290
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Applicant(s): Nir N. Shavit et al.
(Use several sheets if necessary)		Filing Date: April 11, 2000
		Group Art Unit: 2756
		Date Submitted: August 14, 2000
NON PATENT LITERATURE DOCUMENTS		
*Examiner Initial	Cite No.	(Including name of author in capital letters, title of article, title of item, date, pertinent pages, volume-issue number(s), publisher, city and/or country where published.)
JAB	AA	Y. Afek, M. Merritt, G. Taubenfeld, and D. Touitou. "Disentangling Multi-Object Operations," <i>Proceedings of the 16th Annual ACM Symposium on Principles of Distributed Computing</i> , pages 111-120, August 1997. Santa Barbara, CA.
JAB	AB	N. S. Arora, Blumofe, and C. G. Plaxton. "Thread Scheduling For Multiprogrammed Multiprocessors," <i>Proceedings of the 10th Annual ACM Symposium on Parallel Algorithms and Architectures</i> , 1998.
JAB	AC	H. Attiya and E. Dagan. "Universal Operations: Unary versus Binary," <i>Proceedings of the 15th Annual ACM Symposium on Principles of Distributed Computing</i> , 11 pages, May 23-26 1996. Phila. PA.
JAB	AD	Hagit Attiya, Nancy Lynch, and Nir Shavit. "Are Wait-Free Algorithms Fast?" <i>Journal of the ACM</i> , 41(4):725-763, pages 223-232, July 1994.
JAB	AE	Hagit Attiya and Ophir Rachman. "Atomic Snapshots In $O(n \log n)$ Operations," <i>SIAM Journal on Computing</i> , 27(2):319-340, pages 1-42, March 1998.
JAB	AF	G. Barnes. "A Method For Implementing Lock-Free Shared Data Structures," <i>Proceedings of the 5th ACM Symposium on Parallel Algorithms and Architectures</i> , pages 261-270, June 1993.
JAB	AG	B. N. Bershad. "Practical Considerations For Non-Blocking Concurrent Objects," <i>Proceedings 13th IEEE International Conference on Distributed Computing Systems</i> , pages 264-273. IEEE Computer Society Press, May 25-28 1993. Los Alamitos CA.
JAB	AH	M. Greenwald. "Non-Blocking Synchronization and System Design," PhD thesis, Stanford University Technical Report STAN-CS-TR-99-1624, 241 pages, Palo Alto, CA, 8 1999.
JAB	AI	M. B. Greenwald and D. R. Cheriton. "The Synergy Between Non-Blocking Synchronization And Operating System Structure," <i>2nd Symposium on Operating Systems Design and Implementation</i> , pages 123-136, October 28-31 1996. Seattle, WA.
JAB	AJ	M. Herlihy. "A Methodology For Implementing Highly Concurrent Data Objects," <i>ACM Transactions on Programming Languages and Systems</i> , 15(5):745-770, November 1993.
JAB	AK	M. Herlihy and J. Moss. "Transactional memory: Architectural Support For Lock-Free Data Structures," <i>Technical Report CRL 92/07</i> , Digital Equipment Corporation, 12 pages, Cambridge Research Lab, 1992.
JAB	AL	M.P. Herlihy. "Wait-Free Synchronization," <i>ACM Transactions On Programming Languages and Systems</i> , 13(1):124-149, January 1991.
JAB	AM	M.P. Herlihy and J.M. Wing. "Linearizability: A Correctness Condition For Con-Current Objects," <i>ACM Transactions On Programming Languages and Systems</i> , 12(3):463-492, July 1990.
JAB	AN	D. E. Knuth. "The Art of Computer Programming: Fundamental Algorithms," Addison-Wesley, 2nd edition, 3 pages, 1968.
JAB	AO	A. LaMarca. "A performance evaluation of lock-free synchronization protocols," <i>Proceedings of the 13th Annual ACM Symposium on Principles of Distributed Computing</i> , pages 130-140, August 14-17 1994. Los Angeles, CA.
JAB	AP	H. Massalin and C. Pu. "A Lock-Free Multiprocessor OS Kernel," <i>Technical Report TR CUCS-005-9</i> , pages 1-19, Columbia University, New York, NY, 1991.
JAB	AQ	N. Shavit and D. Touitou. "Software Transactional Memory," <i>Distributed Computing</i> , 10(2):99-116, February 1997.
	AR	
	AS	
	AT	
Examiner <i>John A. Dahlke Jr</i>		Date Considered <i>3/12/04</i>

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.



# 3

PATENT

LIST OF PENDING U.S. PATENT APPLICATION(S)

RECEIVED

The following pending U.S. patent application(s) is/are listed for consideration by the Examiner.

AUG 28 2000

TC 2700 MAIL ROOM

- for 1) U.S. Application Serial No. 09/207,940, entitled PLATFORM INDEPENDENT  
DOUBLE COMPARE AND SWAP OPERATION, filed December 9, 1998, by  
inventor(s) Robert Cartwright Jr. and Ole Agesen.

Lamin A. Bullock Jr.

3/12/04

***Pursuant to MPEP § 609(D), Applicant(s) wish(es) to avoid publication of identifying information for the pending applications listed above on any patent that issues from the above-identified application.***

***Applicant(s) request(s) that the Examiner indicate consideration of the pending applications listed above in accordance with MPEP 609(C)(2) by marking "all considered" hereon together with his or her initials, and returning a copy of this page, so marked, with the next communication. THANK YOU.***

U.S. Department of Commerce, Patent and Trademark Office

Attorney Docket No.: 004-4664

Application No.: 09/547,290

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Applicant(s): Nir N. Shavit et al.

(Use several sheets if necessary)

Filing Date: April 11, 2000

Group Art Unit: 2154

Date Submitted: February 1, 2002

## U.S. Patent Documents

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

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## Foreign Patent Documents

							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
<i>jaB</i>	AL	EP 0 466 339 A2	15.01.92	EPO				
	AM							
	AN							
	AP							

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>jaB</i>	AR	Henry Massalin, "Synthesis: An Efficient Implementation of Fundamental Operating System Services," Dissertation submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in the Graduate School of Arts and Sciences, Columbia University, New York, NY, online, 1992; pp. 1-149 XP002172093 [retrieved from the Internet on 2001-07-13: URL: <a href="ftp://ftp.cs.columbia.edu/reports/reports-1992/cucs-039-92.ps.gz">ftp://ftp.cs.columbia.edu/reports/reports-1992/cucs-039-92.ps.gz</a> ].
	AS	
	AT	

Examiner

*John A. Bullock Jr.*

Date Considered

*3/12/04*

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

# 6

U.S. Department of Commerce, Patent and Trademark Office				Attorney Docket No.: 004-4664	
				Application No.: 09/547,290	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use several sheets if necessary)				Applicant(s): Nir Shavit et al.	
				Filing Date: April 11, 2000	
				Group Art Unit: 2154	
				Date Submitted: March 26, 2002	

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U.S. Patent Documents				
*Examiner Initial	Document Number	Date	Name	
	AA			
	AB			
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	AH			
	AI			
	AJ			
	AK			

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Foreign Patent Documents						
					Translation	
	Document	Date	Country		Yes	No
forB +	AL	EP 0 366 585 A	May 2, 1990	EPO		
forB +	AM	WO 86 00434 A	Jan. 16, 1986	PCT		
	AN					
	AP					

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)		
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Examiner: <i>Jim A. Bullock Jr.</i>	Date Considered: 3/12/04
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.

U.S. Department of Commerce, Patent and Trademark Office				Attorney Docket No.: 1004-4664		
				Application No.: 09/547,290		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Applicant(s): Nir Shavit et al.		
(Use several sheets if necessary)				Filing Date: April 11, 2000		
				Group Art Unit: 2142		
				Date Submitted: May 15, 2003		
U.S. Patent Documents						
*Examiner Initial		Document Number	Date	Name		
fab	1	3,886,525	May 1975	Brown et al.		
				RECEIVED		
				MAY 20 2003		
				Technology Center 2100		
Foreign Patent Documents						
					Translation	
		Document	Date	Country	Yes	No
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)						
fab	2	Weiss, Mark Allen, <i>Data Structures &amp; Algorithm Analysis in C++</i> , Second Edition, Reading, Mass., Addison-Wesley, 1999, Chapter 3.				
fab	3	Comer, Douglas, <i>Operating System Design: The Xinu Approach</i> , Englewood Cliffs, New Jersey, Prentice-Hall, Inc., 1984, Chapter 3.				
fab	4	Patterson, David A. and Hennessy, John L., <i>Computer Architecture: A Quantitative Approach</i> , Second Edition, San Francisco, California, Morgan Kaufman Publishers, Inc., 1996, pages 485-495 and 562-572.				
fab	5	Cohoon, James P. and Davidson, Jack W., <i>C++ Program Design: An Introduction to Programming and Object-Oriented Design</i> , Second Edition, New York, New York, WCB/McGraw-Hill, 1999, pages 465-502.				
fab	6	Stroustrup, Bjarne, <i>The C++ Programming Language</i> , Third Edition, Reading, Mass., Addison-Wesley, 1997, pages 461-497.				
Examiner <i>John A. Bullock</i>		Date Considered <i>3/12/04</i>				
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.						